

To: Nebraska Public Service Commission

From: Terry L. Marshall, Fillmore County  
911 Technical Systems

Subject: Solicitation of public and industry comment on issued outlined herein Application Number  
911-014/PI-99

Date: 8/04/05

1. **The Current status of landline 911 in Fillmore County.** Fillmore County is impacted by 16 different telephone exchanges. This is a large number of exchanges for a county of 577 square miles. Based upon past history we have had a number of outages in various exchanges which affect the delivery of 911 landline services. Fillmore County receives 911 calls in all exchanges within Fillmore County and routes 911 calls to other PSAPS where emergency services are delivered by emergency service providers located outside Fillmore County but providing services within Fillmore County. Not all surrounding PSAPS have call routing capability. PSAPS within our area we utilize 911 call transfer (call routing) are Fillmore, Clay and Saline Counties. We would like to see about the feasibility of possibly cutting down the number of exchanges, which could reduce costs, but no action has been taken as to this issue. A trend is developing where many consumers are doing away with wire-line service and using wireless phones. This actually reduces the number of wire-line subscribers in a county thus reducing essential revenue designated to a given PSAP. To counterbalance this trend counties are often required to increase sur-charges for wire-line 911 services just to maintain basic costs and not even considering increase costs for 911 Center operation.
2. **The rate and use of the landline 911 surcharge in Fillmore County.** Fillmore County has a surcharge for hardwire 911 of \$.75 per phone number per month. This generates an approximate revenue of \$32,000.00 per year. A little more than 1/3 goes to the telephone company to provide data retrieval with the remainder of the funds being used for telephone and communications related equipment within the 911 Center. The remainder of the funds are used for general maintenance and operations of the Center. A small amount of the funding goes maintaining those elements of communications essential to getting the emergency call to emergency responders so they can respond to the call.
3. **The current status of enhanced wireless 911 throughout the state.** It is our understanding due to the lack of available funds through the wireless 911 surcharge that any further implementation of enhanced 911 within the state has been placed on hold. It is further our understanding that requests to increase the surcharge to be able to implement enhanced 911 have been denied at this time. This issue causes us great concern as we are receiving an ever increasing number of wireless 911 calls, due to two factors. First, we are on a major north/south transportation route from Mexico, Second, the number of persons using wireless technology is rapidly increasing. Funds received for 911 services on

wireless systems do to the State leaving counties having to absorb both wireless costs and wire-line costs for 911 Center operation from either the local wire-line surcharge or further augment 911 Center costs from local tax dollars.

4. **Implementation of Phase I and Phase II enhanced wireless 911 in other states.** Some other states have implemented both Phase I and Phase II wireless. Without knowing the methodology of how they were implemented, available funding, role of wireless carriers it is not practical to compare to Nebraska. One point seems evident, that planning and available funds were not carefully factored in for implementation of Phase I and Phase II wireless within the state. Another factor in Nebraska is the fact that many of the PSAP's will need to replace aging 911 answering equipment either before Phase II is implemented or shortly after implementation due to the fact of replacement equipment on aging systems will only be available for a short time then replacement parts will no longer be available. The need for wireless 911 is becoming critical especially in areas where there is a lot of highway traffic such as Route 80, Route 81 and other inter-state roadways. The number of wireless calls into the Fillmore County 911 Center is rapidly increasing. With these calls the number of call where the caller does not know where they are at is also a growing concern especially in life safety calls.
5. **Reimbursement of the costs of wireless service providers.** The issue of reimbursement of wireless service providers is a debated issue. The first question should be why are not wireless service providers designing systems capable of providing enhanced 911 information when they install wireless systems. Are those who do not, expect the State or Local Government to pay them for putting in the necessary equipment which they will then turn around and charge political sub-division for access of the data. As we already know this concept has extremely high costs with wireless carriers receiving funds to install equipment then charge for access of data. The question that needs to be resolved is how much government pays private companies to implement costs of wireless providers to provide Phase II services. If governments pays for the equipment then the costs to utilize the data should be provided to government either free or at a much reduced cost from the wireless provider.
6. **Distribution of the wireless surcharge.** The first question that should be asked is where is Phase II implementation needed the worst. A good argument can be made that in cities there is ample information for callers to tell the dispatcher where they are located. There are numerous street signs, building addresses where a caller can indicate where they are so public safety services can respond to a call. Of course there will be some exceptions but these are isolated and not the norm. When you move to rural areas the need can be broken down into two categories. The first category is along high traffic routes such as Route 80, Route 81, Route 77, Route 281 and other heavily traveled roadways. These routes generally see travelers going through the area who do not normally live within the state or are traveling within the state on these routes that they do not normally travel on-such as persons on business or vacationers. In these areas there is a high instance of people calling in emergency calls that do not know exactly where they are at. In actual practice few travelers pay attention to highway mileage markers. In these instances services can have significant

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delays and cause emergency responders to often have to search for the reporting party. These areas should have a priority in having Phase II implemented. The second category is again in rural areas along State Highways and along heavily traveled county roadways. You could factor in large recreation areas covering more than 640 square acres. Again, the problem is people traveling these roadways having an emergency and not knowing where they are at. This process becomes more critical in accident happening during extremely cold periods or during winter months. In these situations time is a critical factor in response. The last issue needing addressing is updating of PSAPS to current technology. Many PSAPS have out-dated equipment that should be replaced when Phase II is implemented. Some of these PSAPS can implement Phase II with old equipment but availability of repair parts and up-grades is severely limited. It is not prudent to implement Phase II using a old equipment that cannot be reasonably maintained.

7. **Consolidation of oversight of landline and wireless 911.** To answer this question requires a technical understanding of telephone companies and how they lay out their phone exchanges. We have numerous exchanges in Fillmore County. It would seem some of these exchanges could be consolidated thus reducing the costs of wireline 911 costs. Telephone companies would also achieve some cost savings in equipment but would have a significant reduction in calling charges they could apply since calling out of a given exchange is a significant revenue producer. In wireless providers there are significant gaps in adequate wireless service areas. In relation to wireless coverage in Fillmore County from Alltel there is what can only be termed significant gaps in providing reliable wireless coverage. It is quite common that emergency calls into the 911 center result in loss of contact with a cell phone user due to this sparse coverage. In addition, in this area we are often have service outages where the signal strength various areas varies from one minute to another. Often making cell phone calls from within homes/businesses is often impossible due to the inability to connect with a cell phone tower. With an increasing number of people using cell phones this is a significant issue. This can be corrected by wireless providers by increasing signal strength reception capability or placing additional cell sites in area where coverage is poor.

8. **Consolidation of public safety answering points.**

The issue of consolidation of Public Safety answering points is considerably more complex than just combining PSAP's. The issue of wireless consolidation to combining PSAP's is much easier since cell towers can route calls much easier. It is noted that cell tower coverage of an area may actually fall within two or more PSAP's. This does create some issues of how calls are handled and may in some cases delay emergency service delivery. However, the larger the area of combining wireless PSAP's will increase some costs of having a longer distance increasing wire-line costs from the tower site to the PSAP. Wire-line consolidation will actually increase costs since the greater distance these lines must be taken to a PSAP will have a negative cost factor. In considering consolidation of PSAP's this issue must be addressed on a case by case basis. Where there are some large consolidated 911 Centers this is mostly been reserved to sparsely populated counties where consolidation is warranted. In doing these consolidations it often takes considerable expense to modify communications systems to have greater coverage areas. The technical design of

expanding communications coverage areas is complex and often expensive. There may be a point of consolidation in smaller counties such as York and Saline where two centers operate. In counties of less than 20,000 persons it is hard to justify two 911 centers from an expense view. However, many times the reason for consolidation is done for political purposes other than for reasons of cost efficiency. I would be the first to say to look at area consolidation should be very carefully approached. Not only for costs involved but political reasons. In Fillmore County we have one center serving the entire county. This system works well and in our opinion best serves the citizens of the county. In many smaller 911 Centers dispatchers may provide for 911 services and also serve within law enforcement agencies in providing staff for jail monitoring. This has proven to be cost effective and no loss of operation of the 911 center efficiency is noted. For sake of discussion, a combined PSAP serving jurisdictions of two or more counties and assuming the cost of combining all dispatch functions from the PSAP is impractical and/or too expensive would handle a 911 call in the following manner. The wireless 911 call would come to the large area PSAP and be screened as to what jurisdiction would handle the actual dispatch. The call would then be transferred to the PSAP handling actual dispatch of public safety agencies of that area. The PSAP to where the call would be transferred would have to obtain specific information relating to the call then dispatch the call to the agencies covering the area where the call originated. This means the calling party would have to provide information to the 911 answering point twice since the call would be handled by two PSAP's. This actually lengthens service delivery to getting the proper agencies to the incident scene. Presently, it is not uncommon for PSAP's to receive 911 wireless calls from location far outside their coverage areas for a wide variety of reasons. These calls are difficult to handle even if the reporting party knows their address because a given address can be similar in different counties or the address, even when unique, is difficult to know what county it originated from. Information from the reporting party is often vague since it is not uncommon for reporting parties, on wireless calls, not to know exactly where they are at ie highway and mile marker, highway or may not even know what town or community they are close to. In rural situations determining the actual location of the reporting party can be very difficult. This becomes even more acute when the reporting party is in a poor wireless coverage area or their wireless phone battery is low causing the call to be dropped. Phase II wireless is helping correct these concerns other than in area where cell phone coverage is sparse and the exact location of the call cannot be accurately determined.

9. **Availability of federal funding, including homeland security funds for projects in Nebraska.** Wireless technology can be a valuable tool to the terrorist. With using throw-away phones with purchased minutes and in locations where Phase II wireless is not implemented the terrorist has available a tool that helps provide invisibility. The same holds true for persons who use the inter-net from public locations or use wireless systems where their location and identity may be difficult to locate. Intelligence gathering of this scale is usually done at the federal level. Seldom do terrorists call PSAP's to tell local responders that they intend to undertake a terrorist act in a jurisdiction. The use of Homeland Security funds at the local level must be designated to actions designed to be able to prepare, respond and recover from a terrorist act. It is our understanding that there are some federal funds available for implementation of wireless cell phone technology. Since the State has taken

the oversight of implementation of wireless technology within the State it would seem that the State take the lead in obtaining those funds for wireless technology implementation. It would appear the passage of LB 516 provides for a coordinated approach through the Public Service Commission to work with counties to obtain funds from varied resources to obtain equipment for 911 systems. This appropriately utilizes the expertise of the Public Service Commission in obtaining funding support assistance for and with counties to implement 911 technology.

**10. Other issues of Wireless service including 911 Service Delivery.**

The advent of cell phone wireless technology has evolved at a much faster rate than expected.

There are in increasing number of people doing away with standard wire-line services to that of using cell phones not only at home but in businesses, on farms, while traveling and for other purposes. Wire-less carriers have increased coverage significantly in higher populated areas and along the inter-state. The process of maintaining a parity service level in rural areas especially those where major highways or inter-state roads exist is sub-standard. In Fillmore County there are a lot of individuals using cell phones. Cell phone coverage is at the very best sub-standard. In this county we basically, only have one provider for cell phone usage.

Considerable discussions have been held with Alltel communications as to seeking improvements in the wireless network serving the county. The coverage is so poor that in most buildings to obtain a signal is nearly impossible or difficult at best. There are areas of the county that to obtain a reliable wireless cell phone signal is nearly impossible. This has a significant impact upon delivery of public safety services. It is not uncommon that a party reporting an emergency is frequently cut off and emergency dispatchers are unable to obtain basic essential information needed to provide emergency services delivery. With the high volume of traffic on Route 81 through the county this is a significant issue. As to the degree of the Public Service Commission can address these concerns is unknown but it would seem that there is some control since the Public Service Commission is dealing directly with implementation of wireless technology in 911 Centers. We feel strongly that adequate coverage is needed in our county and that it should be addressed sooner other than later. We would prefer not to have an issue develop where we were unable to provide service delivery due to the inability to take a wireless line call due to poor coverage. An event of this nature not only would erode the public confidence in 911 system use but places the public at risk especially if they depend upon wireless systems to report emergency situations.